

ABSTRACT

The present disclosure relates to a crystal ingot growth method, in which a single crystal furnace is used to perform crystal ingot growth and includes a crucible containing a silicon melt. The method includes the following steps: dipping a seed crystal in a silicon melt to form a crystal ingot, and applying a horizontal magnetic field with a magnetic field strength of a first preset value, in an axial direction of the crystal ingot, a first distance between a maximum Gauss plane of the horizontal magnetic field and a liquid surface of the silicon melt in the axial direction of the crystal ingot being less than a second preset value; during a body process of a crystal ingot growth, applying a cusp magnetic field with a magnetic field strength of a third preset value, a zero Gauss plane of the cusp magnetic field being located at an R-arc part of the crucible. The present disclosure also relates to a crystal ingot growth apparatus.

(Figure 2)